

Polygamma™ EPDM Membrane Versus Other EPDM Membranes

The following are the USP's of Polygamma EPDM Membranes compared to other EPDM Membrane manufacturers.

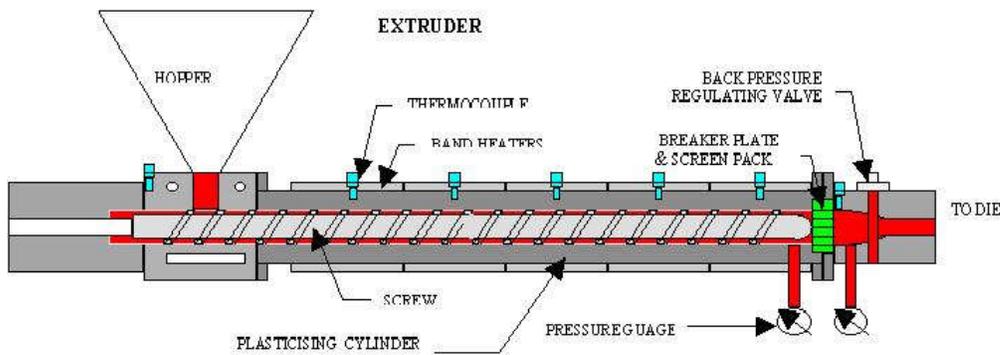
I) **Sheeting Technology**

Other EPDM Manufacturers:



- The rubber compound is passed through a 3 or 4 roll calendar machine to manufacture the EPDM membrane of the required thickness.
- The membrane is less compact, and there are chances of air entrapments in the cross section.
- The sheets manufactured using calendar machines are also known to have fine surface blisters.
- Membranes of higher thickness (generally 1.5 mm (60 mil) and above) are generally not single-ply. They are made using the doubling process. Two thinner sheets are joint together to make a thicker one.
- Chances of air entrapment and de-lamination of the sheets are very high.

Polygomma



- The rubber compound is passed through cold feed roller head before calendaring the same.
- The pin barrel type cold feed extruder enhances the mixing and dispersion of the rubber compound and it is kneaded between the barrel and the screw.
- The membrane manufactured has outstanding homogeneity, more compact and have a higher density.
- Single-ply EPDM membrane upto 6 mm can be manufactured, without the doubling or lamination process.

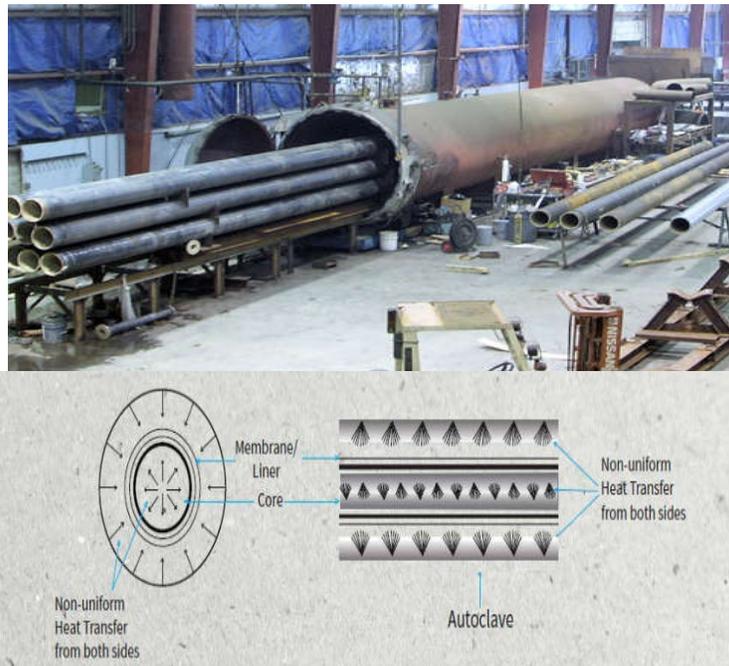
POLYGOMMA INDUSTRIES PVT. LTD.

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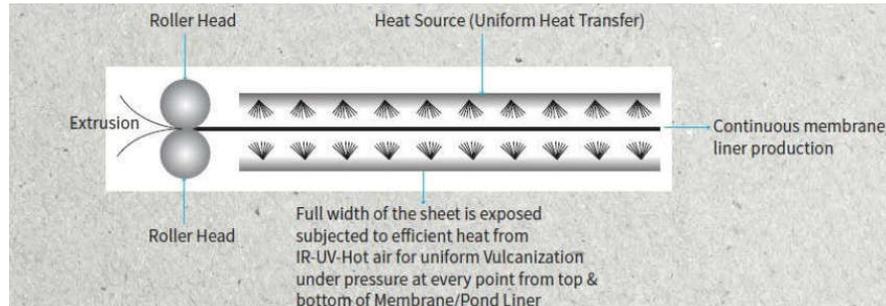
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II) Vulcanizing Technology

Other EPDM Manufacturers:



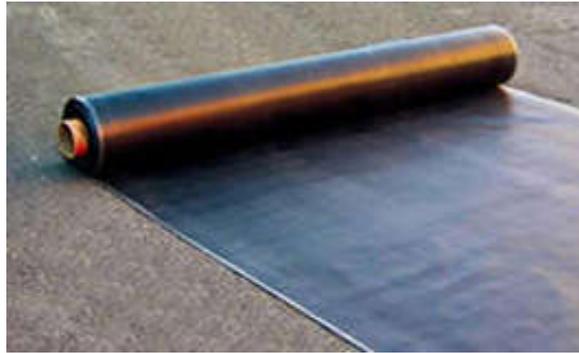
- EPDM membranes are vulcanized/cured using autoclaves/steam boilers.
- Uncured EPDM membrane is wound around a mandrill subjected to steam, from core of the mandrill and from the autoclave.
- The membrane closest to the steam source is cured earlier, and is over cured by the time the steam reaches the furthestmost part of the membrane.
- The membrane is not evenly cured across its length, width and thickness.
- The steam generated for vulcanization also pollutes the environment.

Polygomma:

- The EPDM membranes are not vulcanized using autoclaves/steam boilers. They are vulcanized using a continuous online vulcanizing mechanism.
- The EPDM membrane is subjected to a uniform heat source to ensure that all the areas of the membrane are evenly cured.
- Additionally this process does not pollute the environment in any form.

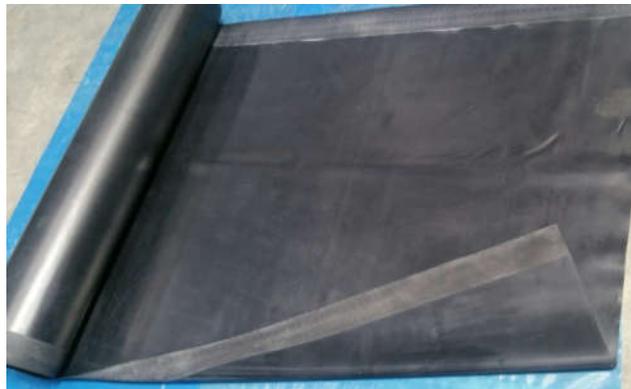
III) Factory Buffed Overlap

Other EPDM Manufacturers



- Uniformly grinding/buffing the overlap areas is very important to get good bond strength.
- Most EPDM membrane manufacturers do not offer factory buffed/grinded overlap areas/joints.
- Instead they offer an array of accessories such as primers & sealants to secure the overlap joints.

Polygomma:



- EPDM membranes are offered with factory buffed/grinded overlap joints/areas.
- This saves time and money in terms of labor costs and accessories costs.
- When used in conjunction with a proper adhesive (such as Polygomma BA) no additional primers or sealants are required to secure the joints.
- Factory buffed/grinded overlap joints are currently available in EPDM membranes with widths of 1.2 meters.

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IV) Anti-Talc***Other EPDM Manufacturers***

- Due to the vulcanizing technology used, an anti-talc & graphite powder is applied on the EPDM membrane before vulcanization.
- This is to prevent the uncured EPDM membrane from sticking when wound on a mandrill.
- The anti-talc & graphite powder not only spoils the aesthetics of the membrane, but also is an issue while seaming the overlaps and adhering the EPDM membrane to the substrate.

Polygamma

- We use a water soluble anti-tac solution after vulcanization, for easy unwinding at site, during installation.
- This anti-tac solution can be washed off with water (if required).
- It maintains the aesthetics and causes no problems while seams the overlap joints and while adhering the EPDM membrane to the substrate.

V) Acid Resistance***Other EPDM Manufacturers***

- Due to the basic rubber compounding EPDM membranes of other manufacturers may not perform in a corrosive environment such as locations near sea water/weather, industrial areas etc.
- This affects the performance of EPDM membrane in an acidic environment or if water >pH 7 (acidic) falls on the membrane.

Polygamma

- Our rubber compounding ensures that our EPDM membranes perform as required even in corrosive and acidic environments such as locations close to sea water/weather and industrial areas, etc.
- This is vital, especially if the EPDM membrane has to be used in a corrosive environment.
- We test this by dipping our EPDM membrane in 33% Conc. HCl (Hydrochloric Acid) at room temperature for 168 hours. Our EPDM membrane remains unaffected in this condition.
- This is very important as rain water is almost always <pH 7 (acidic).

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